

PHASE I BOOK EXPLOITATION SOV/3650

Kostykov, Yurii Vasil'yevich, and Vladimir Dmitriyevich Kryzhanovskiy

Osnovy televideniya (Fundamentals of Television) Moscow, Voyen. izd-vo M-va obor. SSSR, 1959. 389 p. No. of copies printed not given.

Ed.: M.V. Krylov; Tech. Ed.: M.P. Zudina.

PURPOSE: This book is intended for officers, noncommissioned officers, and private soldiers desiring to broaden their knowledge of television engineering. It may also be useful to the general reader.

COVERAGE: The book discusses physical and electrical foundations of modern black-and-white, color, and stereoscopic television and photo transmission (facsimile) systems. Some military uses of the television equipment are mentioned in the introduction and briefly described in the closing chapter of the book. Chapters I, II, III, VII, XI, XIII, XIV, XVI and XX were written by Yu.V. Kostykov, chapters IV, V, VI, VIII, IX, X, XV, XVII, XVIII, and XIX by V.D. Kryzhanovskiy, and chapter XII by both authors. There are 57 references: 50 Soviet (2 of which are translations), 5 English, and 2 French.

Card #41

KOSTYKOV, Yuriy Vasil'yevich; YERMOLAYEV, Lev Nikolayevich; VLADIMIROV,
V.T., red.; MEDNIKOVA, A.N., tekhn.red.

[First book for the radio amateur] Pervaisa kniga radioliubitelia. Izd.2., perer. i dop. Moskva, Voen.izd-vo M-va obor.
SSSR, 1961. 287 p. (MIRA 14:3)
(Radio)

KOSTYKOV, Yu.V.; YERMOLAYEV, L.N.; VLADIMIROV, V.G., podpolkovnik,
~~redaktor~~; LEVINSKAYA, N.Z., tekhnicheskiy redaktor.

[Radio amateur's first book] Pervaia kniga radioliubitelia.
Moskva, Voen.izd-vo Ministerstva oborony SSSR, 1955. 301 p.
(Radio-- Amateurs' manuals) (MLRA 8:11)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300046-6

KOSYGIN, Ye. N.

Technika svizhi [Communication technology]. Moscow, Vozdat, 1958. 128 p.

SC: Monthly List of Russian Acquisitions, Vol. 7 No. 2 May 1959.

KOSTYKOV, Yu. V.

KOSTYKOV, Yu.V.; ALEKSANDROV, V.N., mayor, redaktor; KUZMIN. I.F.,
~~tekhnicheskiy~~ redaktor

[Technology of communication] Tekhnika aviazi. Moskva, Voennoe
izd-vo Voennago ministerstva SSSR, 1953. 335 p. [Microfilm]
(Telecommunication) (MLRA 7:9)

KOSTYKOV, N.I., kandidat tekhnicheskikh nauk.

Effect of the group composition of fuels on engine performance
data. [Trudy] MVTU no.35:95-99 '55. (MIRA 9:7)
(Motor fuels) (Gas and oil engines)

LAGUNOV, V.; SHUREMOV, A.; TROFIMOV, M.; KOSTYKOV, I., slesar';
FERULEV, A.

In organizations of our society. Izobr.i rats. no.10:
16-17 0 '59. (MIRA 13:2)

1. Predsedatel' Yakutskogo oblastnogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov (for Lagunov).
2. Starshiy inzhener byuro tekhnicheskoy informatsii i izobretatel'stva, L'vov (for Shuremov). 3. Predsedatel' soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov Vel'giyskoy bumazhnay fabriki, g.Borovich (for Trofimov). 4. Zavod "Soyuz," predsedatel' soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov, Leningrad (for Kostykov). 5. Predsedatel' zavodskoy organizatsii Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov Lys'venskogo metallurgicheskogo zavoda, g.Lys'va, Permskoy oblasti (for Ferulev).
(Efficiency, Industrial)

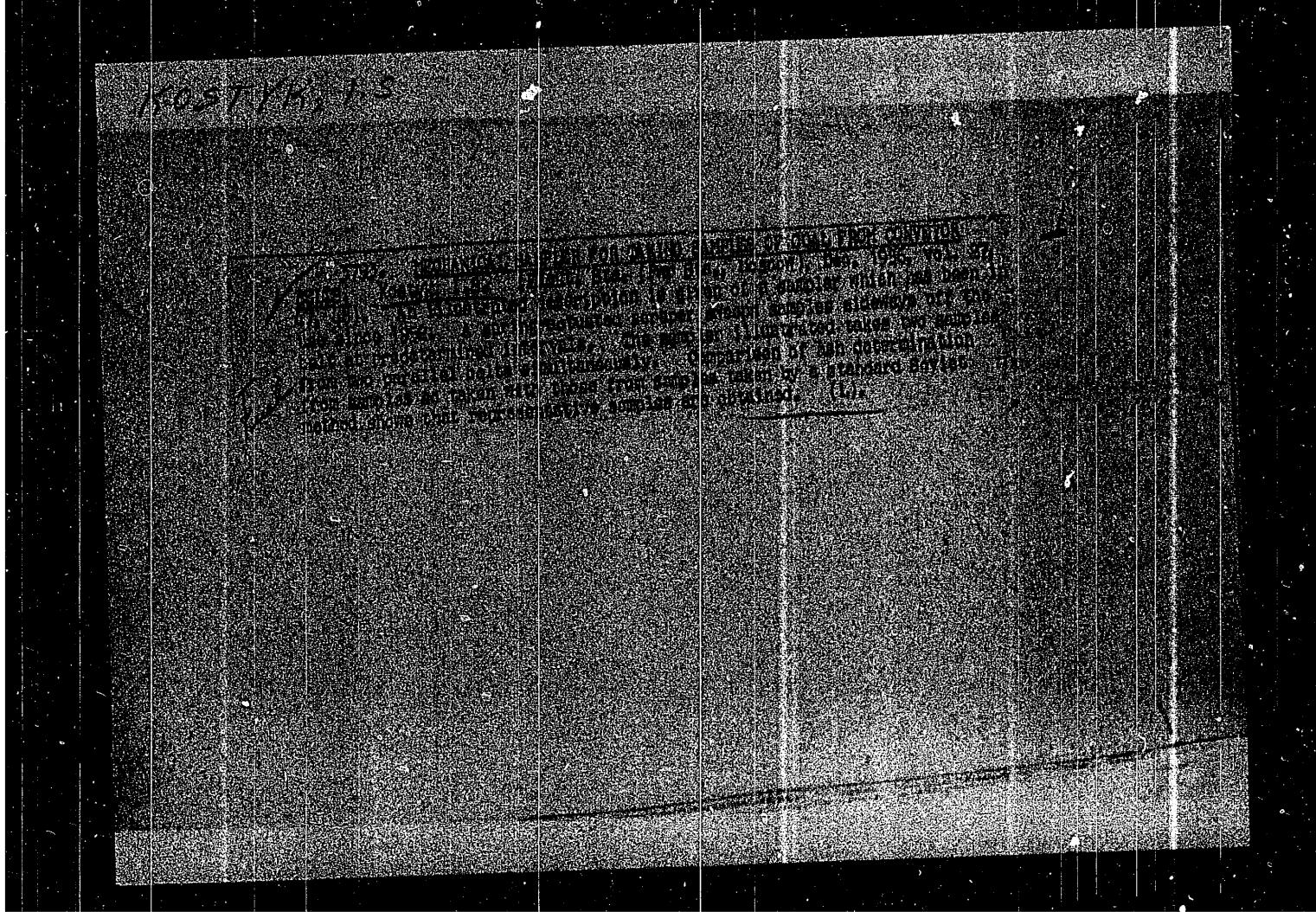
KOSTYK, V.S., podpolkovnik meditsinskoy sluzhby

Modified operation in varicose enlargement of the veins of the
spermatic cord. Voen.-med.zhur. no.7:87-88 J1 '56. (MLRA 9:11)
(VARIX) (SPERMATIC CORD--SURGERY)

1. KOSTYK, V. S.
2. USSR (600)
4. Leishmaniosis
7. Treatment of Pendinski ulcer. Khirurgiia no. 10, 1952

Monthly Lists of Russian Acquisitions, Library of Congress, March, 1953, Unclassified.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300046-6



KOSTYGOVA, T.; NIKULINA, G.

Why does man need a nose? Nauka i zhizn' 30 no.5:67-69 My '63.
(MIRA 16:10)

YAKOVLEV, N.N.; KALEDIN, S.V.; KRASNOVA, A.F.; LESHKEVICH, L.G.;
POPOVA, N.K.; ROGOZKIN, V.A.; CHAGOVETS, N.R.; KOSTYGOVA, L.A.

Characteristics of physiological and chemical adaptation of the body
to muscular activity in relation to the length of rest intervals
between tasks during training. Fiziol. zhur. 47 no.6:752-757 Je '61.
(MIRA 15:1)

1. From the Research Institute of Physical Culture, Leningrad.
(EXERCISE) (REST) (METABOLISM)

L 45956-66

ACC NR: AP6018454

the equilibrium distribution. Relative population inversion and change with radial distance is explained by the collisions of a second kind between hydrogen and argon atoms. The authors also note the interesting result that not only does simple inversion occur, but also at lower densities the condition for light amplification

$$n_5 > \frac{g_5}{g_4} n_4$$

(where g_4, g_5 are statistical weights of levels 4 and 5) is satisfied. Orig. art.
has: 1 figure, 2 tables.

SUB CODE: 20/ SUBM DATE: 21Dec65/ OTH REF: 002

Card 2/2 b1g

L 45956-66	EWT(d)/EWT(l)/EWP(m)	IJP(c)	WW/AT
ACC NR: AP6018454	SOURCE CODE: UR/0051/66/020/006/1085/1086		
AUTHOR: <u>Gol'dfarb, V. M.</u> ; <u>Il'ina, Ye. V.</u> ; <u>Kostygova, I. Ye.</u> ; <u>Luk'yanov, G. A.</u> ; <u>Silant'yev, V. A.</u>			
ORG: none			
TITLE: Population density of hydrogen levels in an argon-hydrogen plasma stream			
SOURCE: Optika i spektroskopiya, v. 20, no. 6, 1966, 1085-1086			
TOPIC TAGS: multicomponent plasma, supersonic nozzle, plasma generator, electron density, plasma electron temperature			
<p>ABSTRACT: Spectral emission of the argon plasma generated in the constant current plasmatron and flowing through a <u>supersonic nozzle</u> has been investigated. The <u>electron density</u> range was 10^{12} cm^{-3} to $3 \cdot 10^{15} \text{ cm}^{-3}$ and <u>electron temperature</u> was 5000 to 2500°K. The spectrum was found to contain the lines of argon, hydrogen, recombination continuum and molecular bands of nitrogen (second positive system). The relative line intensity was determined by using Balmer lines for calibration. The spectrum was studied as a function of the radial position in the stream and the distance from the end of the nozzle. The population density of levels with principal quantum numbers $n=4$ and 5 increased with increasing distance to the axis and was found inverted at low electron densities. At the same time the $n=3$ and 4 as well as $n=6$ levels did not differ from</p>			
UDC: 533.9			
Card 1/2			

ANATOLIYEV, Fedor Alekseyevich; ABAGYANTS, G.A., doktor tekhn.
nauk, retsenzent; KOSTYGOV, Ye.D., inzh., retsenzent;
ABRAMOVICH, G.A., doktor tekhn. nauk, prof., nauchn.
red.; OZEROVA, Z.V., red.; CHISTYAKOVA, R.K., tekhn. red.

[Heat exchangers in marine steam-power plants] Teploobmen-
nye apparaty sudovykh parosilovykh ustroystvok. Leningrad,
Sudpromgiz, 1963. 494 p. (MIRA 16:10)
(Boilers, Marine) (Heat exchangers)

KOTYLY, V.V., inzh., red.; TSIREL'SON, N.D., doktor fil'lo. nauk,
nauchn. red.; and V. V. K. (V. V. K. Kholod), nauchn. red.
KIVENKO, ...A., inzh., nauchn. red.; and V. V. K. (V. V. K. Kholod),
inzh., nauchn. red.; and V. V. K. (V. V. K. Kholod), nauchn. red.,
red., BOGATYR', I.B., red.

[Communications of the tenth conference of the Central Committee of
AVI (existing at the moment of publication) were sent to the
presid. T.V. Kosygin, the Leningrad regional party org., and
MGB. 434 p.

1. Informatsionniy otdel, MVD, SSSR, etc.
2. Predsedatel' Natsional'nogo komiteta SSSR po molochno-
ym (for Kosygin).

KOSTYGOV, V. V.,

"Development of the dairy industry in the warm regions of the USSR"

report to be submitted for Dairy Federation, International (IDF) 48th Annual Meetings
Massey College, Palmerston North, New Zealand, 4-9 Nov 63

KOSTYGOV, V. V.

"Production of Cows milk in the warm regions of the USSR."

report presented at the 47th Annual Meeting of the Intl. Dairy Federation,
Aarhus, Denmark, 28 Aug - 1 Sept 1962.

INIKHOV, G.S., zasl. deyatel' nauki i tekhniki, doktor khim. nauk, prof.; SKORODUMOVA, A.M., kand. biol. nauk; SHAPIRO, L.R. [deceased]; MILYUTINA, L.A., inzh.; DEMUROV, M.G., kand. sel'khoz. nauk; LEBEDEVA, K.S., kand. sel'khoz. nauk; KYURKCHAN, V.N.; VASILEVSKIY, V.G., inzh.; SAVINOVSKIY, N.G., kand. tekhn. nauk; VEDRASHKO, V.F., kand. med. nauk; SOKOLOVSKIY, V.P., prof.; BEGUNOV, V.L., inzh.; KAZENNOVA, A.R.; VEDRASHKO, V.F., kand. med. nauk; KOSTYGOV, V.V., red.; SKURIKHIN, M.A., MOLCHANNOVA, O.P., doktor biol. nauk, prof.; SPERANSKIY, G.N., zasl. deyatel' nauki, doktor med. nauk, prof.; KIBIHA, Yo.I., tekhn. red.

[Dairy foods] Molochnaia pishcha. Moskva, Pishchepromizdat, 1962. 419 p. (MIRA 15:10)

1. Glavnnyy kulinar Ministerstva torgovli RSFSR (for Kazennova).
2. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Speranskiy, Skurikhin). 3. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Molchanova).

(Cookery (Dairy products)) (Dairy products)

KOSTYGOV, V.

Poultry farms and processing plants in the vicinity of Moscow.
Mias, Ind. SSSR 29 no.2:16-18 '58. (MIRA 11:5)

1. Nachal'nik upravleniya myasnoy i molochnoy promyshlennosti
Moskovskogo oblastnogo sovnarkhoza.
(Moscow Province--Poultry plants)

1857/80 v

KOSTYGOV, V.

"The butter and margarine¹ problem. Moloch. prom. 18 no. 6:43-45
'57. (Oleomargarine) (Butter) (MLRA 10:6)

KOSTYGOV, V.

Utilization of productive capacity of milk canning plants. Moloch.
prom. 18 no.3:3-5 '57. (MLRA 10:4)

1.Zamestitel' ministra promyshlennosti myasnykh i molochnykh.
(Milk, Condensed) (Milk dried)

KOSTYGOV, V.

Equipment is of the utmost importance in the preparation of the dairy industry for production in 1957. Moloch. prom. 17 no.6:
4-7 '56. (MLRA 9:10)

1. Zamestitel' ministra promyshlennosti myasnykh i molochnykh
produktov SSSR.
(Dairy industry--Equipment and supplies)

Kostygov, V.

USSR /Chemical Technology, Chemical Products
and Their Application

Food industry

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 33018

Author : Kostygov V.

Title : Development Outlook in the Dairy Industry

Orig Pub: Moloch. prom-st', 1956, No 8, 9-11

Abstract: No abstract.

Card 1/1

KOSTYGOV, V.

USSR/Chemical Technology. Chemical Products and Their Application -- Food industry,
I-28

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6686

Author: Kostygov, V.

Institution: None

Title: The Dairy Industry of Sweden

Original
Publication: Moloch. prom-st', 1956, No 5, 41-44

Abstract: No abstract

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KOSTYGOV, V.V.

KIVENKO, S.F.; LUK'YANOV, N.Ya.; PAKHIRKO, A.A.; BEZDENEZHNYKH, V.,
retsenzent; BORISOV, S., retsenzent; KOSTYGOV, V.V., redaktor;
AKIMOVA, A.D., redaktor; GOTLIB, E.M., tekhnicheskij redaktor.

[Production of condensed and powdered milk in butter plants] Proiz-
vodstvo zgushchennogo i sukhogo moloka na maslodel'nykh zavodakh.
Pod red. V.V.Kostygova. Moskva, Pishchepromizdat, 1954. 153 p.
(Milk, Condensed)(Milk, Dried) (MLRA 8:3)

1. KOSTYGOV, V.
2. USSR (600)
4. Dairy Plants
7. Prospects for a technological re-equipment of the dairy industry. Moloch.prom., 14, no. 1, 1953.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Unc1.

KOSTYGOV, V

USSR (600)

Cheese

Quality and variety of cheese. Mol. prom. 13 no. 5 (1952)

9. Monthly List of Russian Accessions, Library of Congress, August 1951, Vol.

CHEKMENEV, V.T.; KOSTYGOV, V.I.

Universal device for electricians. Prom.energ. 17 no.4:28-29
Ap '62. (MIRA 15x4)
(Electric meters)

LI, P.Z.; MIKHAYLOVA, Z.V.; SEDOV, L.N.; KOSTYCOV, V.A.

Synthesis and investigation of unsaturated polyester resins
based on N-bis-beta-oxethylaniline. Plast.massy no.12:11:14
'61. (MIRA 14:12)

(Esters)
(Resins, Synthetic)

Synthesis and examination ...

21119
S/191/61/ccc/c12/c03/c07
B101/B11C

567, 1225 (1952); 28, 1205 (1955)) are mentioned. There are 5 figures, 5 tables, and 5 references; 2 Soviet and 3 non-Soviet. The two most recent references to English-language publications read as follows. R. N. Fuoss, D. Edelson, J. Polymer Sci., 6, 533 (1951); L. H. Vaughan, Plast. Inst. Trans. and J., 29, no. 79, 7 (1961).

Table 4 Physicomechanical properties of hardening products obtained from styrene solutions of polyester (I) and (II).

Legend: (A) Characteristics; (B) solution of (I); (C) solution of (II); (a) percentage of styrene in the initial solution; (b) shrinkage during hardening, %; (c) specific gravity, g/cm³; (d) Brinell hardness, kg/mm²; (e) limit of bending strength, kg/cm²; (f) modulus of elasticity on bending, kg/cm²; (g) specific impact strength, kg/cm/cm²; (h) thermostability according to Vicat, °C; (i) thermostability according to Martens, °C; (k) water absorption for 24 hr, %; (l) amount of substances extracted with acetone in a Soxhlet apparatus for 12 hr, %

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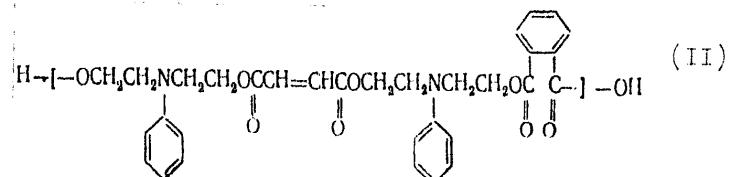
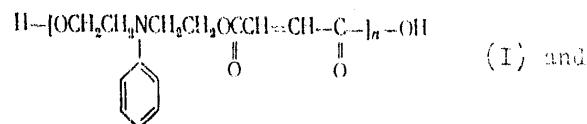
Synthesis and examination . . .

isopropyl benzene hydroperoxide; (c) 50% solution of methyl-ethyl ketone peroxide in dimethyl phthalate; (d) isopropyl benzene hydroperoxide + NK (NK) accelerator containing approximately 0.7% Co; (e) methyl-ethyl ketone peroxide + NK. Initiators (a)-(c) were used at 100°C, combinations (d) and (e) at 20°C. Table 4 gives physicomechanical data for the resins obtained. The authors found: (1) Synthesis is almost 50% shorter than with diethylene glycol; (2) compatibility with styrene is higher than for diethylene-glycol or ethylene-glycol resins; (3) at 20°C, hardening of (I) in the presence of benzoyl peroxide is very slow (> 5000 min) due to inhibition by an excess of amine groups; (4) at 100°C, fast gel formation sets in (3-5 min) in the presence of benzoyl peroxide, but hardening is incomplete. The Brinell hardness remains low; (5) the optimum at 20°C was 1-4% methyl-ethyl ketone peroxide with 2-4% NK; at 100°C: 1-2% isopropyl benzene hydroperoxide; (6) with both resins, cross linking is induced by a temperature elevation from 20 to 100°C; (7) shrinkage increases linearly with increasing styrene content; (8) the water resistance of synthesized resins is very high. This confirms the assumption that water-resistant polyester resins are obtained by using aryl-containing alcohol components. Papers by K. D. Petrov, G. B. Tal'kovskiy (ZhPEh, 25,

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Synthesis and examination ...

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are given for the resins obtained. Polyester (I) is a reddish-brown, transparent resin with a softening point of about 45°C, a molecular weight of 1250, and a maximum compatibility with styrene of 50%. Polyester (II) is orange-red and has a molecular weight of 1600. Both resins are soluble in organic solvents and have a specific gravity of 1.276. The authors studied the physicomechanical properties of the copolymers of (I) and (II) with styrene and the following initiators: (a) benzoyl peroxide; (b) 90%

Card 2/5

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S/191/61/000/012/003/007
B101/B110

AUTHORS: Li, P. Z., Mikhaylova, Z. V., Sedov, L. N., Kostygov, V. A.

TITLE: Synthesis and examination of unsaturated N-bis- β -hydroxy-ethyl aniline polyester resins

PERIODICAL: Plasticheskiye massy, no. 12, 1961, 11-14

TEXT: This paper deals with the synthesis and examination of unsaturated polyester resins whose water resistance was increased by aromatic components. N-bis- β -hydroxy-ethyl aniline (diethanol aniline) was used as initial substance. The synthesis was conducted by esterification of commercial diethanol aniline (melting point: 53-55°C) with maleic or maleic + phthalic acids. The compounds were fused at 175 ± 2° in a CO₂ atmosphere. The reaction course was observed by determining the acid number. After 35-45 min, the compounds were cooled down to 130-140°C, 0.02% of hydroquinone was added as stabilizer, and they were cooled down to room temperature. Reaction time was 3-5 hr, and the yield approximately 95%. Structures

Card 1/6

KOSTYGOV, N. M.

Pharmacological properties of octatenamin
(2(1'-azacyclooctyl)-ethyl guanidine sulfate). Farm. i teka,
26 no. 1:28-35 Ja-F '63. (MIRA 17.7)

1. Kafedra farmakologii (zav. - prof. T. A. Mel'nikova)
Leningradskogo khimiko-farmatsevicheskogo instituta.

MEL'NIKOVA, T.A.; KOSTYGOV, N.M.

Comparative study of the antipyretic, analgesic, and antiphlogistic action of some pyrazolidine derivatives. Trudy Len.khim.-farm.inst. no.13:220-228 '62. (MIRA 15:10)

1. Kafedra farmakologii Leningradskogo khimiko-farmatsevticheskogo instituta (zav. prof. T.A.Mel'nikova).
(PYRAZOLIDINE)

YEFIMENKO, O.M.; MEL'NIKOVA, T.A.; ZOZULYA, R.N.; KOSTYGOV, N.M.

Polyporenic acid A, an antibiotic from the fungus Polyporus betulinus (Bull) Karst. Antibiotiki 6 no.3:215-220 Mr '61.

(MIRA 14:5)

1. Laboratoriya biokhimii nizshikh rasteniy (zav. - prof. P.A. Yakimov) Botanicheskogo instituta AN SSSR i kafedra farmakologii (zav. - prof. T.A.Mel'nikova) Leningradskogo khimiko-farmatsevticheskogo instituta.

(ANTIBIOTICS)

MEL'NIKOVA, T.A.; ZAPLATINA, O.P.; KOSTYGOV, N.M. (Leningrad)

Effect of certain new cholinolytic substances on the function
of the adrenal cortex; clinical and experimental investigations.
Probl.endok.i gorm. 5 no.5:14-19 S-0 '59. (MIRA 13:5)

1. Iz kafedry farmakologii Leningradskogo khimiko-farmatsevticheskogo instituta (zav. - doktor med.nauk T.A. Mel'nikova) i khirurgicheskogo otdeleniya Oktyabr'skoy zheleznodorozhnoy bol'nitsy (zav. Z.P. Sorokina).

(PARASYMPATHOLYTICS pharmacol.)
(ADRENAL CORTEX pharmacol.)

KOSTYGOV, N. M. Cand Med Sci -- (diss) "Influence of thiolum preparations (mercaptosuccinic acid and unithiol) upon the effect produced by mercury compounds." Len, 1959. 17 pp (Min of Health RSFSR. Len Sanitary Hygiene Med Inst), 200 copies (KL, 47-59, 116)

KOSTYGOV, N.M.

Mercaptosuccinic acid and unithiol as antidotes of mercury.
Trudy LSGMI 37:214-237 '58. (MIRA 12:8)

1. Kafedra farmakologii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav.kafedroy - deyatel'nyy chlen AMN SSSR prof. S.V.Anichkov).
(MERCURY, pois.)

antidotal eff. of 2,3 dimercaptopropane sodium sulfonate & mercaptosuccinic acid in exper. animals (Rus)
(SULFHYDRYL COMPOUNDS, eff.)

2,3-dimercaptopropane sodium sulfonate, antidotal eff. in exper. mercury pois. (Rus)
(THIOMALATES, eff.)

mercaptosuccinic acid, antidotal eff. in exper. mercury pois. (Rus)

KOSTYGOV, N.M.

Antidote effect of mercaptosuccinic acid and unithiol in relation to mercury. Farm. i toks. 21 no. 3:64-69 My-Je '58 (MIRA 11:7)

1. Kafedra farmakologii (zav. - deystvitel'nyy chlen AMN SSSR prof. S.V. Anichkov) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

(DIURETICS, MERCURIAL, antagonists,
mercaptosuccinic acid & sodium 2, 3-dimercaptopropanesulfonate, in animals (Rus))

(SUCCINATES, effects,
mercaptosuccinic acid, inhib. of mercurial diuresis &
comparison with sodium 2,3-dimercaptopropanesulfonate
in animals (Rus))

(SULPHYDYL COMPOUNDS, effects,
sodium 2, 3-dimercaptopropanesulfonate, on mercurial
diuresis & comparison with mercaptosuccinic acid in
animals (Rus))

KOSTYGOV, N.M.

Effect of thiol compounds and mercury on the secretion and resynthesis of proteins and lipoids in the small intestine [with summary in English]. Vop.med.khim. 3 no.6:420-427 N-D '57. (MIRA 11:2)

1. Kafedra farmakologii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta
(SULFHYDRYL COMPOUNDS, effects,
thiol deriv., on small intestine lipoproteins &
phospholipids metab. (Rus))
(MERCURY, effects,
on small intestine lipoproteins & phospholipids metab.
(Rus))
(PHOSPHOLIPIDS, metabolism,
small intestine, eff. of mercury & thiol cpds. (Rus))
(LIPOPROTEINS, metabolism,
same)
(INTESTINES SMALL, metabolism,
lipoproteins & phospholipids, eff. of mercury & thiol.
cpds. (Rus))

CRLIN, A.S., prof.; VYRUBOV, D.N.; ALEKSEYEV, V.P.; KALISH, G.G.;
KOSTYGOV, N.I.; KRUGLOV, M.G.; KRUTOV, V.I.; MIZERNYUK, G.N.;
ROGANOV, S.G.; STEPANOV, Yu.A., prof., retsenzent; YEGORKINA,
L.I., red. izd-va; SOKOLOVA, T.F., tekhn. red.

[Internal combustion engines]Dvigateli vnutrennago sgoraniia.
Pod red.A.S.Orlina. Moskva, Mashgiz. Vol.3. [Systems, regula-
tion, automatic control]Sistemy. Regulirovanie. Avtomatizatsiya.
1962. 307 p. (MIRA 16:1)
(Gas and oil engines) (Automatic control)

Internal Combustion Engines; (Cont.)

SOV/4188

systems and mechanisms used in them. The book corresponds to the program of the course on "Internal-Combustion Engines" at the Moscow Higher Technical Institute imeni N. Ye. Bauman. V. P. Alekseyev wrote chapters V and VI; N. I. Kostygov, the introduction, section 2 of chapter I, and chapters II, III and IV; M. G. Kruglov, chapter VII (except sections 40 and 42), section 57 of chapter X, and chapters XII and XIII; A.N. Krylov, chapter VIII, and sections 40 and 42 of chapter VII; O. B. Leonov, section 1 of chapter I, and chapter IX; G. N. Mizernyuk, chapters X (except section 57) and XI. The authors thank Professor D. N. Vyrubov. There are 38 references: 35 Soviet, 2 English and 1 French.

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KOSTYGOV, N.I.

PHASE I BOOK EXPLOITATION

SOV/4188

Alekseyev, Valentin Petrovich, Nikolay Ivanovich Kostygov, Mikhail Georgiyevich Kruglov, Aleksey Nikolayevich Krylov, Oleg Borisovich Leonov, and Georgiy Nikolayevich Mizernyuk

Dvigateli vnutrennego sgoraniya; opisatel'nyy kurs (Internal Combustion Engines; Descriptive Course) Moscow, Mashgiz, 1960. 451 p. 15,000 copies printed.

Ed. (Title page): A. S. Orlin, Professor; Ed. (Inside book): L. I. Yegorkina; Managing Ed. for Literature on Automotive, Tractor, and Agricultural Machine Building: I. M. Bauman, Engineer; Tech. Eds.: B. I. Model' and T. F. Sokolova.

PURPOSE: This textbook is intended for students at machine-building schools of higher education, and for personnel engaged in the production and operation of internal-combustion engines.

COVERAGE: The book describes the construction and operation of all the main types of reciprocating internal-combustion engines, and of individual

Card 1/8

ORLIN, A.S., professor; VYRUBOV, D.N.; KOSTYGOV, N.I.; LEBEDEV, S.Ye.
[deceased]; ROGANOV, S.G.; SIMAKOV, T.F.; CHURSIN, M.M.; PETROV,
V.A., professor, retsenzent [deceased]; PONOMAREVA, K.A., redaktor;
MODEL', B.I., tekhnicheskiy redaktor

[Internal combustion engines] Dvigateli vnutrennego sgoraniia. Pod
red. A.S.Orlina. Moskva, Gos. nauchno-tekh. izd-vo mashinostroit.
lit-ry. Vol.2. [Design and calculations] Konstruktsii i raschet.
1955. 534 p.

(Gas and oil engines)

(MLRA 9:8)

SURKOV, V.D.; ROGOV, I.A.; KOSTYGOV, L.V.

Orientation of the particles of biological suspensions in a high-frequency electric field. Izv. vys. ucheb. zav.; pishch. tekhn. no.2:83-86 '63. (MIRA 16:5)

1. Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy promyshlennosti, kafedra protsessov i apparatov pishchevykh proizvodstv.

(Suspensions (Chemistry)) (Electric fields)

KHIZHNYAK, P.D., glavnnyy red.; GLAZOV, G.A., zam.glavnogo red.; BLYUMBERG, V.A., red.; VASIL'KOV, B.A., red.; GLUSHKOV, A.T., red.; ZHOLOBOV, V.V., red.; KAMNEV, P.V., red.; KANTIYEV, N.M., red.; KISELEV, M.I., red.; KOSTYGOV, I.N., red.; MOISEYEV, A.A., red.; NOVIKOV, A.P., red.; SIMIN, S.A., red.; CHERNYSHOV, P.S., red.; SHAGURIN, K.A., red.; SHUB, I.Ye., red.; DEMENT'YEVA, I.K., red.; SEMENOVA, A.V., tekhn.red.

[Experience of mechanical engineers; technical information publication] Opyt mashinostroitelei; informatsionno-tehnicheskii sbornik. Leningrad, Sovet nar.khoz.Leningr.ekon.administrativnogo raiona. TSentr.biuro tekhn.informatsii, 1960. 88 p.

(MIRA 13:11)

(Mechanical engineering)

IVANOV, Sergey Aleksandrovich; KOSTYGOV, I.N., inzh., retsenzent;
MIRKIN, M.S., inzh., red.; BOBODULINA, I.A., red.izd-va;
SHCHETININA, P.V., tekhn.red.

[Planning multiple adjustment of automatic lathes] Proektirovaniye gruppovykh nalogok tokarnykh avtomatov. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 70 p.

(MIRA 14:1)
(Lathes)

Kostygov, I. N.

PAGE 1 BOOK REPORTAGE

807A/33

Автоматизация производственных процессов в машиностроении (Automation of Mechanical Manufacturing Processes in Manufacturing). 1959. 353 p. Printed slip case bound. 4,000 copies printed.
General Ed.: I.M. Kostyev; Berlitzovskii, N.Y. Pashchenko, Committee of Technical Sciences, Sovnarkom, ed. T.S. Vilkov, Candidate of Technical Sciences, Doctor of Philos. Sci.; Publishing House "Giz Sistem" and M.A. Gurevich, Head Eng., O.T. Speranskaya, Managing Ed. for Literature on Machine Building Technologies (Engineering Division, Management), Prof. P. Kostyev, Engineer.

PURPOSE: This book is intended for technical personnel.

CONTENT: The book deals with the automation of mechanical manufacturing processes in small-batch production in metallurgical industry. The use of hydraulic cutting tools, tools for metalworking, and practical experience in the introduction of cutting tools into industrial practice is described. The improvement of such small-scale production methods is shown. The economic effects resulting from these changes and methods are described. Examples of such new problems of program control, especially for the simplest control systems, and a number of the original systems are described. Characteristics are mentioned. There are 57 references. No Soviet and in English. Author: I.M. Kostyev and V.N. Trifunov. Price: 12.50 rubles. Exports Galzed in the U.S.S.R.

Kostyev, I.M. and V.N. Trifunov. V.N. Trifunov's Scientific Copying Slides

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TE/20/maa

10-25-60

KOSTYCOV, I. N.

BARUN, Vladimir Abramovich; BUDINSKIY, Aron Abramovich; SHAUMIAN,
G.A., prof., doktor tekhn.nauk, retsenzent; KOSTYGOV, I.N.,
inzh., red.; BORODULINA, I.A., red.izd-va; VARKOVETSKAYA,
A.I., red.izd-va; NIKOLAYEVA, I.D., tekhn.red.

[Automatic control of machine tools; means of automatization
and their use] Avtomaticheskoe upravlenie metallorezhushchikh
stankov; sredstva avtomatizatsii i ikh ispol'zovanie. Moskva,
Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 295 p.
(MIRA 12:7)

(Machine tools) (Automatic control)

KOSTYGOV, I.N.

The 1140-type automatic single-spindle turret lathe. Biul.tekh.-
ekon.inform. no.5:13-14 '58.
(Lathes) (MIRA 11:7)

25(2)

PHASE I BOOK EXPLOITATION

SOV/1296

Kostygov, Igor' Nikiforovich and Shilin Shmulyovich Sheynin
Avtomaty prodol'nogo tocheniya (Automatic Swiss-type Longitudinal
Turning Machines) Moscow, Mashgiz, 1958. 293 p. 7,000 copies
printed.

Reviewer: Boguslavskiy, B.L., Professor; Ed.: Gutner, N.G., Engineer;
Ed. of Publishing House: Chfas, M.A.; Tech. Ed.: Sokolova, L.V.;
Managing Ed. for Literature on Machine-building Technology
(Leningrad Division, Mashgiz): Naumov, Ye.P., Engineer.

PURPOSE: This book may be used as an operating manual for the various
models of automatic lathes described, as well as for the study of
automatic machines for longitudinal form turning. It may also be
utilized in designing special machines based on Swiss-type auto-
matic lathes.

COVERAGE: The book acquaints the reader with the most commonly used
Soviet-made single-spindle automatic lathes for longitudinal form
turning. It also gives a description of their construction,
special features and characteristics, and discusses the problems
of maintenance and settings for the most efficient operation of

Card 1/6

KOSTYGOV, I.N.

Use of plastics-impregnated plywood in practice. Stan.i instr. 26
no.11:38 N '55. (MLRA 9:2)
(Plywood)

L 12410-65

ACCESSION NR: AP4048364

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'sky i proektnyy institut
redkometallicheskoy promstvlennosti (State Design and Planning Scientific Re-
search Institute of the Rare Metals Industry)

SUBMITTED: 00

ENCL: 00

SUB CODE: GC

NO REF Sov: 001

OTHER: 003

ATD PRESS: 3126

Cord 3/3

I 1948-65

ACCESSION NR: AP4048364

oxide. Sorption of the rare-earth elements was effected from solutions containing rare-earth chlorides, and the elution of rare-earth impurities with a solution of complexone. Rare-earth complex compounds in each fraction of eluate were decomposed with oxalic acid and rare-earth oxalate precipitate converted to oxides, which were analyzed spectroscopically for impurities. Additions of coprecipitating impurities, either inactive or radioactive (isotopes), were necessary in the cases of fractions with impurity content below the sensitivity limit (10^{-3} — 10^{-4}) of direct spectroscopic analysis. The increase in sensitivity measured by the maximum enrichment factor was 10—250, depending on impurity and base material. The recovery of rare-earth impurities determined from the total γ -radioactivity in the eluate was in the 90—104% range. The ion-exchange method of separating rare-earth impurities can be employed for concentrating as low as 10^{-4} — 10^{-5} % impurities. Spectroscopic analysis for one element may be limited to one eluate fraction only, if radioactive tracers are introduced into the original solution before sorption. The formula for calculating the content of an element in the sample is given. The spectral excitation source was a d-c arc between carbon electrodes. The spectra were produced on a DFS-3 spectrograph with diffraction grating and were recorded photographically. Analytical pairs of spectral lines and the formula for calculating impurity concentration in the sample are given. Orig. art. has: 3 figures, 3 tables, and 2 formulas.

Card 2/3

L 12110-65 SMT(u)/SMP(b) J1/J0

ACCESSION NR: AP4048364

8/0032/64/030/011/1339/1343

AUTHOR: Melamed, Sh. G.; Kostrygov, A. S.; Lishchenko, T. V.

TITLE: Spectrochemical determination of rare-earth impurities in rare-earth oxides

SOURCE: Zavodskaya laboratoriya, v. 30, no. 11, 1964, 1339-1343

TOPIC TAGS: rare earth oxide, yttrium oxide, neodymium oxide, praseodymium oxide, lanthanum oxide, rare earth oxide analysis, spectrochemical analysis, rare earth impurity determination, impurity concentration, ion exchange chromatographic concentration

ABSTRACT: A combined chemical and spectroscopic method has been developed for analyzing rare-earth impurities in high-purity yttrium, neodymium, praseodymium, and lanthanum oxides. The impurities concentration technique—a preliminary step to their spectroscopic determination—was perfected to increase the sensitivity of the spectroscopic analysis. Chromatographic ion exchange in a column packed with KI-2 cationic resin was described for concentrating Ho, Dy, Tb, and Cd in yttrium oxide; Sm, Pr, Ce, and La in neodymium oxide; Nd, Ce, and La in praseodymium oxide; and Nd, Pr, and Ce in lanthanum

Cord 1/1

5(2)

PERIODIC BOOK EXPLORATION 807/1727

Abdulov, M. S. Institut gosudarstvennoi analiticheskoi khimii

Metallurgicheskiye elementy, polucheniye, analiz, primenenie
Khimicheskaya ekstraktsiya, (Analysis and Application) Novosibirsk, Izd-vo AN SSSR,
1958. 351 p. 2,200 copies printed.Bryzgalov, Z.P., Professor; Editorial Board: I. P. Al'marin,
Corresponding Member, USSR Academy of Sciences; I. N. Zverevsky, Doctor
V. T. Rumyantsev, Doctor, Candidate of Technical Sciences;
Chemical Sciences, and Yu. G. Sal'yannikov, Candidate of Chemical Sciences;
Eds. of Publishing House: D. A. Trifonov and T. G. Lev; Tech. Ed.: S. G.PURPOSE: This book is intended for scientists, chemists, teachers and students
of higher educational institutions, chemical and industrial engineers and
other persons concerned with the extraction, preparation, use or study of
rare earth elements.SCOPE: This collection contains reports presented at the June 1956 Conference
on Rare Earth Elements at the Institute of Geochemistry and Analytical Chemis-
try and V. I. Vernadsky of the Academy of Sciences USSR. The articles
treat chemical methods of separating rare earth substances, methods of prospecting
rare earth ore, ion exchange chromatography, chemical analysis and some in-
dustrial applications of rare earths. Data from contributing authors show
elements, rare earth deposits, Soviet scientists who are studying rare earths
and earth metals; Martynov, Mal'tikov, Khrushchev, Shchukin, Plastov, Gerasimov,
Shchukin, Mal'nikov, Dubovik and especially N. A. Orlova, who first isolated the
molecular compounds of these elements in the pure state. Presented are complex
molecular compounds of these elements and determined their specific properties.
REFERENCES are given at the end of each article.

INDEX OF CONTENTS:

Andreyev, Z.P., T.V. Lisobedova, N.Y. Kravchenko, and O. I. Borodikova
(State Rare Metals Scientific Research Institute and Soviet Agricultural
Academy) Izdat. Nauk. i Tekhn. Sistem. (Editor), Trillium B in the Ion Exchange Separation of
Rare Common Rare Earth Elements 100Andreyev, Z.P., and A.S. Korshyy (Moscow Agricultural Academy Institute
E.A. Tsvetkov and Soviet Rare Metals Scientific Research Institute).
Characteristics of Trillium A and Trillium B in the Ion Exchange Separation of
Elements in the Cerium Subgroup 108Bryzgalov, L. I. Obzory po gosudarstvennoi universitetnoi nauchnoi radiotekhniki
Lomonosova, Dzhidzhikashvili, Abul'ot (Moscow State University Institute
N. V. Lomonosov, Faculty of Chemistry), Some Problems of the Chromato-
graphic Separation of Rare Earth Elements 112Bryzgalov, Ya. Ya., V. P. Khrushev, and V. S. Kolosova (Institut gosudarst-
vennoi universiteti) Izdat. Nauk. i Tekhn. Sistem. (Editor), Separation of
Chromate Elements (also Khar'kov Institute for the Radiochemistry Institute, Institute
of Radiochemistry and Separation Institute for the Radiochemistry Institute, Institute
Experiment on the Separation of Elements of the Cerium Subgroup in Cerium 116

Card 5/1

ANDREYEVA, Z.F., dots., kand. nauk; KOSTYGOV, A.S., nauchnyy sotrudnik.

Characteristics of certain eluents in the ion exchange separation
of ceria earths. Dokl. TSKhA no.29:389-391 '57. (MIRA 11:8)
(Rare earths) (Trilon)

L 08339-67 EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/HW/WB
ACC NR: AR6033103 SOURCE CODE: UR/0137/66/000/007/G028/G029

AUTHOR: Gol'dfarb, V. M.; Kostygov, A. S.; Yukhno, M. M.; Stepanov, A. V.

TITLE: Obtaining copper, brass, and bronze rods directly from the melt 40

SOURCE: Ref. zh. Metallurgiya, Abs. 7G236

REF SOURCE: Uch. zap. Leningr. gos. ped. in-ta im. A. I. Gertsena, v. 265, 1965, 144-150

TOPIC TAGS: molten metal, drawing, rod drawing

ABSTRACT: Laboratory experiments have been carried out for producing rods from copper, bronze, and brass by drawing directly from the melt.¹ The process of drawing is similar to that for aluminum alloys. The drawing equipment consists of an induction furnace with a vacuum-tube generator and a graphite-fireclay crucible; a protective atmosphere is recommended so as to ensure a smooth surface and minimize both oxidation¹ and burning out the alloy components. Orig. art. has: 2 figures and 1 table. Bibliography of 6 titles. [Translation of abstract]

SUB CODE: 11/

Card 1/1 net

UDC: 669.3.01

L 03766-67 EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/WW/HW/JG
ACC NR: AR6029496 SOURCE CODE: UR/0137/66/000/006/D036/D036 48

AUTHOR: Donskoy, A. V.; Kostygov, A. S.; Klitin, N. P.; Lokshin, V. A., B
Stepanov, A. V.

TITLE: Production of longitudinally ribbed pipe from molten metal and the investigation of thermal and manufacturing properties of the pipe 74

SOURCE: Ref. zh. Metallurgiya, Abs. 6D251

REF SOURCE: Uch. zap. Leningr. gos. ped. in-ta im. A. I. Gertseva, no. 265, 1965, 12-32

TOPIC TAGS: pipe, ribbed pipe, convective heat exchange

ABSTRACT: Longitudinally-ribbed pipes produced from molten metal by the A. V. Stepanov method possess a combination of properties which in a number of cases, makes them suitable for use in the production of heat-exchange equipment. The convective heat exchange in clusters of longitudinal pipe has a pattern identical to internal heat exchange in channels during longitudinal joining. The production technology of longitudinally ribbed pipes is discussed in detail. Orig. art. has: 14 figures. L. Kochenova. [Translation of abstract] [AM]

SUB CODE: 13/
Card 1/1 - 1/1

UDC: 621, 771, 35

L 09389-67

ACC NR: AR6033107

directly from the melt. Orig. art. has: 8 figures. Bibliography of 15 titles.
L. Kochenova. [Translation of abstract]

SUB CODE: 13/

Card 2/2 mle

L 09389-67 EWP(k)/EWT(m)/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AR6033107 SOURCE CODE: UR/0137/66/000/007/D043/D043

AUTHOR: Bogolyubov, G. K.; Gol'dfarb, V. M.; Donskoy, A. V.; Kostygov, A. S.; Stepanov, A. V.

TITLE: Producing thin-walled flattened sheet pipe (radiator strip) directly from the melt

SOURCE: Ref. zh. Metallurgiya, Abs. 7D316

REF SOURCE: Uch. zap. Leningr. gos. ped. in-ta im. A. I. Gertseva, no. 365, 1965, 75-80

TOPIC TAGS: pipe, metal drawing, radiator pipe, flattened pipe

ABSTRACT: Metal drawing for radiator strip has been carried out on a laboratory unit. The strip was drawn from A Mts alloy. The type of equipment and some technological problems were developed and solved for producing 4-, 6- and 10-channel strip with a 0.3—1.0-mm gage. The production technology for a 13 channel strip is described. An experimental batch (~300 m) of radiator strip for two radiators of a tractor radiator was produced and analyzed. Semicontinuous and continuous units were designed for producing thin-walled flattened sheet pipes

1. KOSTYOS, T. exp.
2. USSR (60)
4. Party Clinic
7. Determination of productive capacity, Israel, pp. 12-13, 1953.
9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

LILENKOV, I.P., kand.veterinarnykh nauk; KOSTYGINA, R.F., veterinarnyy vrach

Remarks on the problem of using infusions of hay, conifer needles,
and silage juice. Veterinariia 37 no.1:59-60 Ja '60.

(MIRA 16:6)

1. Veterinarno-bakteriologicheskaya laboratoriya, g. Arzamas.
(Hay--Therapeutic use)
(Confierae--Therapeutic use)
(Ensilage--Therapeutic use)

LILENKOV, I. P. (Candidate of Veterinary Sciences) and KOSTYGINA, R. F.
(Veterinary Doctor, Arzamassk Inter-District Veterinary Bacteriological
Laboratory, Gor'ki Oblast'). (Abstracted by V. A. ALIKAYEV)

"Notes on the method used to determine carotene in blood sera by
means of G. D. Dubrovins's apparatus."
Veterinariya, vol. 39, no. 2, February 1962 pp. 81

KOSTYGIN, G.S., inzh.

Elimination of network faults in VTI regulators. Elek. sta.
36 no.12:79 D '65. (MIRA 18:12)

NIKITIN, P.Z.; KOST'YEV, N.K.; BORISEVICH, Z.S.

Second Conference on Blastproof Electrical Equipment. Prom.energ.
17 no.5:54-55 My '62. (MIRA 15:5)
(Electric engineering--Safety regulations)
(Donetsk--Congresses)

KHORUNZHIY, V.A., red.; RIBAS, Yu.M., red.; BORISEVICH, Z.S., red.;
VERTYACHIKH, V.G., red.; KOST'YEV, N.K., red.; MOVSEROV, N.S.,
red.; ZHIGULIN, Yu.V., red.; RAKOVICH, I.I., red.; RUVINSKIY,
V.A., red.; TULIN, V.S., red.; FETISOV, P.A., red.; FILIMONOV,
P.V., red.; IGLITSYN, I.L., red.; LARIONOV, G.Ye., tekhn.red.

[Rules for the manufacture of explosion-proof electric equipment]
Pravila izgotovleniya vzryvozashchishchennogo elektrooborudovaniia.
Moskva, Gos.energ.izd-vo, 1960. 54 p. (MIRA 13:11)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po avtoma-
tizatsii i mashinostroyeniyu.
(Electric apparatus and appliances)

KOSTYCHEVA, G.

This we can do. Mest. prom. i khud. promys. no.5:2 My '63.

1. Direktor Orekhovo-Zuyevskogo rayonnogo bytovogo kombinata,
Moskovskaya obl.

(Orekhovo-Zuyev--Service industries)

KOSTYCHEV, Sergey Pavlovich

N/5
641
.K86

Izbrannyye Trudy po Fiziologii i Biokhimii Mikroorganizmov (Selected Works Concerning Physiology and Biochemistry of Microorganisms)
Moskva, Akademkniga, 1956.

V. Graphs, Ports, Tables.

At Head of Title Page: Akademiya Nauk SSSR.

Bibliography at End of Each Chapter.

Lib. Has: V 1.

BC

R-II 3

Conditions for the semi-plant production of citric acid. A. Korovaynik and V. Bano (Bull. State Inst. Agric. Microbiol. U.S.S.R., 1953, 5, 8-27).— After 3 days growth at 20-32° of young cultures of *A. niger*, the medium beneath the fungus is replaced by a 20% sugar solution without minerals or N. Production of citric acid is complete in 4 days. Yield 64% of the sugar fermented. The fungus layer should be 1 cm. thick. The yield is reduced if evaporation is permitted during fermentation.
(Ch. Ann. (p))

ATM-ELA METALLURGICAL LITERATURE CLASSIFICATION

1. SUBJECTIVE CLASSIFICATION

2. SECONDARY CLASSIFICATION

3. PRIMARY CLASSIFICATION

4. INDEXING

5. SIGN BORROWER

6. SIGN ONT. LIB.

7. DATE DUE

16

Lactic acid production from whey. M. V. Afanas'eva and S. P. Kostuchev. *Schriften central. biokhim. Forschungsinst. Naturforschungsbund. (U.S.S.R.)* 2, 100-111 (1932). Although *B. cerevisiae* can ferment lactose in concn. as high as 15-16% the optimum concn. is about 10%. The lactose in whey was practically quantitatively fermented, and the yield of lactic acid amounted to 99.103% of theory, calcd. on the amt. of sugar fermented.

Julian F. Smith

16

Biochemical production of citric acid. S. P. Kostuchey. *Schriften centr. biochem. Forschungsinst. Nahr.-Genussmittel.* (U.S.S.R.) 2, 70-99 (1933).—Fermentation conditions for making citric acid from sugars were studied. O deficiency stops the fermentation, although a considerable loss in O content is endured with little effect. Efforts to use hydrolyzed potato starch as a cheap raw material failed because of extreme mycelium growth and low acid yield. Raw sugar gave better results, the loss in yield being less than the saving in price. Broad flat vessels can be successfully used for the fermentation.

Julian F. Smith

COMMON ELEMENTS		ONE AND TWO DEGREES		THREE AND FOUR DEGREES		FIVE AND SIX DEGREES		SEVEN AND EIGHT DEGREES																																																																																																															
PROCESSES AND PROPERTIES INDEX																																																																																																																							
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1ST AND 2ND OMBERS
PROCESSES AND PROPERTIES INDEX

BC

11-4

Fixation of atmospheric nitrogen and formation of ammonia by *Azotobacter*. S. P. KOSTYT, SOKOLOV and SAKOUMOVA (Bull. Acad. Sci. U.S.S.R., 1951, 661-671). — NH_3 is the first identifiable product of the fixation of atm. N_2 by *Azotobacter*. Its formation occurs only in presence of energy-providing material. *A. Windlandii* forms NH_3 by destruction of org. N compounds; with glycine and peptone, this process consists of deamination. Such secondary formation of NH_3 is possible only after the complete consumption of the energy-providing material, and hence differs sharply from the primary formation. Each of these reactions takes place only in living cultures. *A. Windlandii* is not killed when kept for 2 days in an O_2 -free atm., but in absence of O_2 , fixation of atm. N_2 is greatly retarded. T. H. POPS.

ASH-31A METALLURGICAL LITERATURE CLASSIFICATION

67-11-2007

PROCESSES AND PROPERTIES INDEX

BC

A-4

Thermal constant and temperature coefficient of fermentation by expressed yeast juice and yeast maceration juice. S. KOSTITSCHEV and G. MEDVYEDOV (Bull. Acad. Sci. U.S.S.R., 1931, 635-660).—Chemical reactions in living cells may be characterized by the high vals. of their heat of activation (thermal const.), $A = \ln(k_2/k_1) \cdot RT_2 T_1 / (T_2 - T_1)$, and of their temp. coeff. Ω_{12} at low temp. For fermentations by expressed and macerated juices from yeast, no thermal const. exists; the vals. of A and Ω_{12} for the two juices are very high for the range 1—12° or even for 5—12°. It is concluded that zymase is not a single enzyme and, owing to the regular formation of the same products over the temp. range 1—40°, probably not a simple mixture of different enzymes. T. H. PORK.

AMSLA METALLURGICAL LITERATURE CLASSIFICATION

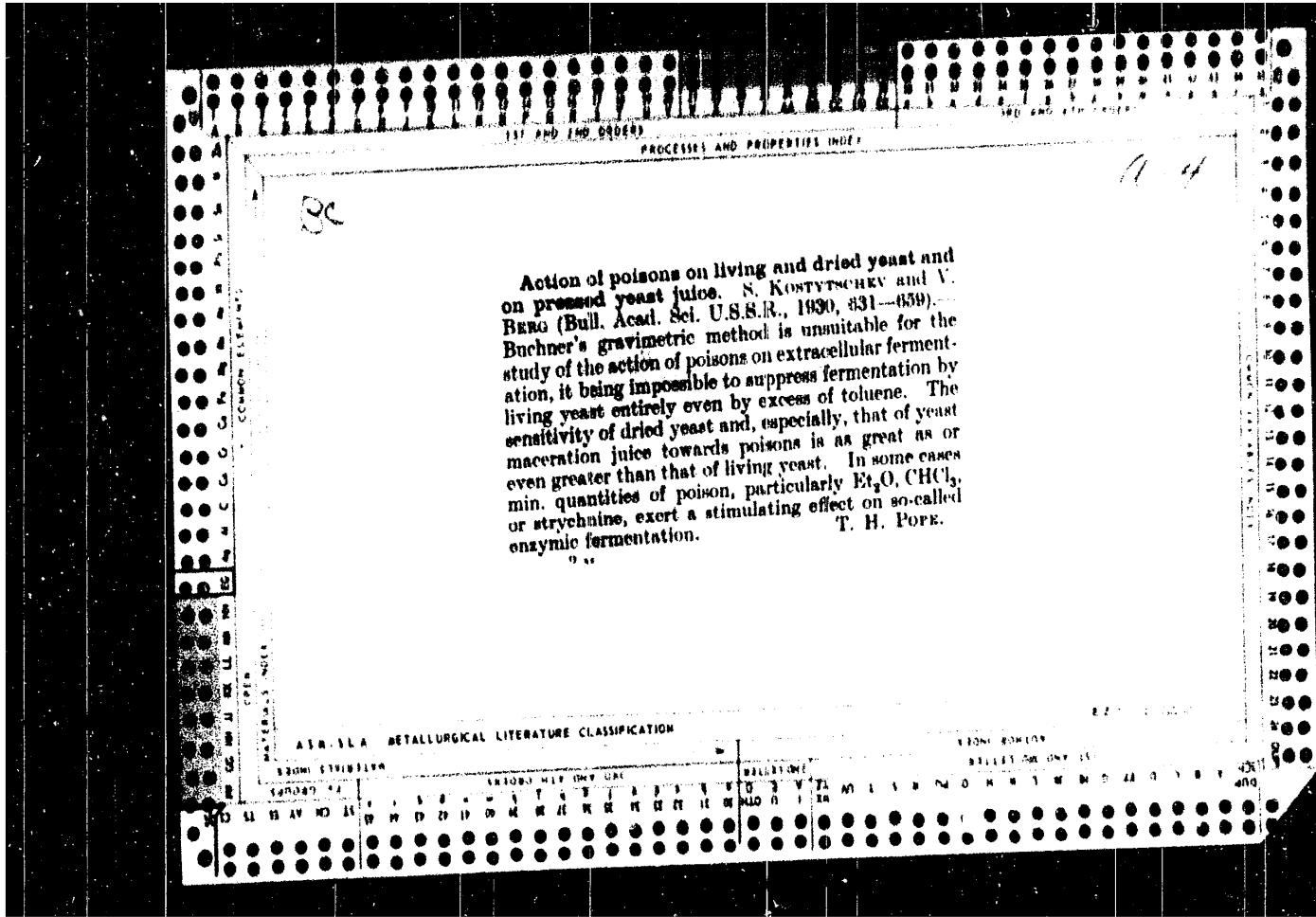
CLASSIFICATION

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300046-6

KOSTYCHEV, S. I.

"Croyavlenii zhizni na zemle (The Appearance of Life on Earth), 1931

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300046-6



Action of poisons on living and dried yeast and
on pressed yeast juice. N. KOSTYTSCHKOV and V.
BERO (Bull. Acad. Sci. U.S.S.R., 1930, 631-639).—
Buchner's gravimetric method is unsuitable for the
study of the action of poisons on extracellular fermenta-
tion, it being impossible to suppress fermentation by
living yeast entirely even by excess of toluene. The
sensitivity of dried yeast and, especially, that of yeast
maceration juice towards poisons is as great as or
even greater than that of living yeast. In some cases
min. quantities of poison, particularly Et_2O , CHCl_3 ,
or strychnine, exert a stimulating effect on so-called
enzymic fermentation. T. H. PORK.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300046-6

Studies on the photosynthesis of plants on the Transcaucasian Coast. S. P. Kostuk
and V. A. Bigrig. Bull. Acad. sci. U. R. S. S., Class. sci. phys.-math., 1930, 011-30,
cl. C, A, 23, 313. The article describes expts. with many plants pertaining to the as-
similation of CO₂. The results are tabulated in 24 tables. The intensity of photo-
synthesis varies at different times of the day. With the exception of the bamboo plants,
all the plants showed a distinct reaction toward sudden increases in temp., and in hot
days assimilated CO₂ only during the forenoon. The observation that sun heat produces
a restrictive action on photosynthesis was sustained by expts. which showed that leaves
kept in the shadow manifested a considerably stronger photosynthetic activity than the
ones exposed to the sun. In many cases a production of CO₂ by the plants was noticed
in day time which phenomenon may have been caused by a strong increase of temp.
The intensity of photosynthesis varies considerably with the time of the year, being in
the month of June 2 or 3 times stronger than in July or in August. L. J.

ASIA-SEA METALLURGICAL LITERATURE CLASSIFICATION

X2001 X2010
X2010 X2010

ABILITY ONE ONLY 101

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300046-6

Studies on the photosynthesis by plants in the polar region. S. P. KOSTICHKOV,
E. N. BAZURINA AND V. A. CHIKANOV. Bull. Acad. sci. U.R.S.S., Classe sci. phys.
math., 1930, 600 610. The present article represents the third part of the study of the
production of org. substances by plants in daylight under different climatic conditions.
Quant. analysis of photosynthesis by plants in the polar region showed that in the summer
the photosynthesis takes place during the entire 24-hr. period. The daily photo-
synthesis corresponds to a curve having its highest spot at noon, and its lowest at mid-
night. These results have a special interest when compared with the ones obtained for
the Caucasus plants, which showed active photosynthesis only during the forenoon.
In the polar region no production of CO₂ was noticed in daytime, while, on the contrary,
this phenomenon was frequently observed in southern countries. L. JACOULEFF.

1/1

ASIA-SLA METALLURGICAL LITERATURE CLASSIFICATION

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EXJORDN LIBRARY

EXJORDS LIBRARY

EXONI EXPLORER

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EXJORDS LIBRARY

PRINCIPLES AND PROPERTIES INDEX

Daily course of photosynthesis with plants of Central Asia. C. P. KONYUTCHENOV and E. K. KARDO-SYSOVA (Bull. Acad. Sci. U.S.S.R., 1930, 467—498).—Measurements of photosynthesis, both during short exposures and for the whole day, in Central Asia give results higher than any previously noted. Cultivated plants in wet regions work fairly regularly throughout the whole of the day, very large quantities of organic matter being accumulated; particularly high yields are obtained with grasses. Xerophytes show very wide variations in the daily course of photosynthesis, the yield being sometimes very high and sometimes quite low. Owing to the minimal leaf-surface development, the formation of organic substance for the whole plant is less than for cultivated plants in wet districts. Plants of the Karakumka sandy desert exhibit varying behaviour as regards photosynthesis, all of them, with the exception of *Aristida pannata*, liberating considerable quantities of carbon dioxide during the afternoon.

T. H. PARK.

ASR SLA METALLURGICAL LITERATURE CLASSIFICATION

БРОНІ СТАНДАРТИ

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ЧАСОВОЇ КЛАСИФІКАЦІЇ

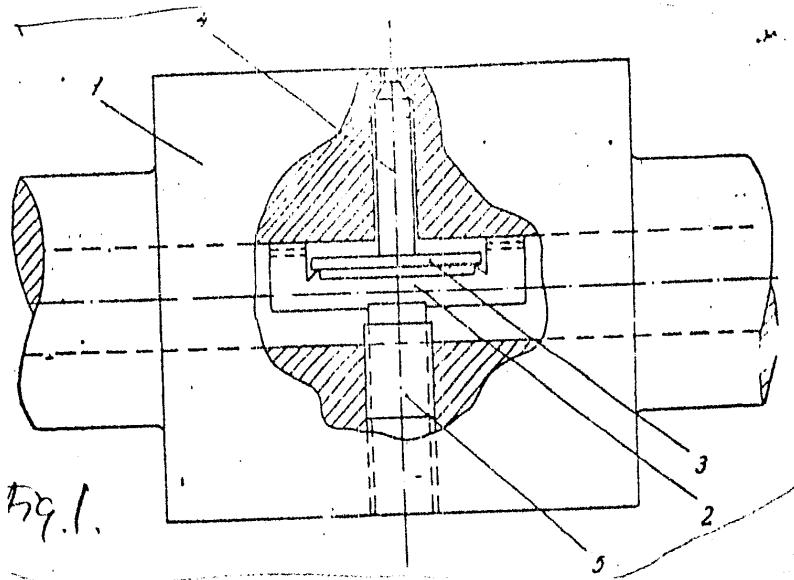
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ЧАСОВОЇ КЛАСИФІКАЦІЇ

The use of wire tension gauges for ...

S/637/61/000/000/008/008
D201/D301

Fig. 1.



Card 3/3

S/637/61/000/000/008/008
D201/D301

The use of wire tension gauges for ...

to the pressure of the rolled metal transmitted to it by pin 4. The pressure translator used was a tension-gauge, glued on to the plate and making part of a bridge circuit. There are 2 figures and 7 references: 6 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Institut avtomatiki i elektrometrii SO AN SSSR, Novosibirsk (Novosibirsk Institute of Automation and Electrical Measurements of the Siberian Branch of the AS USSR)

Card 2/3

3/137/61/000/012/085/149
A006/A101

AUTHORS: Kostychev, P.S., Shevchenko, G.I., Salida, G.P.

TITLE: A new method of determining elastic flattening of rolling mill rolls

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 19, abstract 12D127 ("Tr. Konferentsii po avtomat. kontrolyu i metody elektr. izmereniy, 1959", Novosibirsk, Sib. otd. AN SSSR, 1961, 353 - 355)

TEXT: A new method was developed to measure the elastic flattening of rolls during the rolling process. Wire strain gauges are employed as converters for the measurements. Curves are submitted for the first time which characterize flattening of the rolls during rolling and are recorded with the aid of an oscillograph. ✓

N. Vudina

[Abstracter's note: Complete translation]

Card 1/1

tion zone, the pin 4, pressed by the rolled metal presses and ^{deform} the plate 3. The magnitude of this bend of plate 3 is proportional
Card 1/3 ✓

SOV/137-57-10-19031

Experimental Determination of the Rate of Motion of Metal (cont.)

metal through the contact area. This instrument converts the displacement of a reference point into changes in current, which are recorded on a vibrating-oscilloscope film. To do this, two slide wires, enclosed in a symmetrical measuring bridge, the slides of which are in mechanical contact with a point in the specimen, are employed. The entire instrument is mounted on a bracket that is mounted to the table of the rolling mill. Mechanical contact between the slides and a point on the specimen is effected by a thin steel wire, one end of which is connected to the point on the specimen and the other to the roll surface. If the S of the point on the specimen and on the roll surface are identical, the slides, joined to the steel wire by means of a special device, are not displaced. Change in the S of the point on the specimen relative to the peripheral S of the rolls causes the slides to move, and this is recorded on the oscillograph. Calculations show that the current in the gage is proportional to the increase in the path of the point under investigation. The instrument showed itself to be of adequate sensitivity and convenience in operation. An oscillogram of change in the S of displacement of one of the points of a Pb specimen rolled on a mill with rolls of 115 mm diameter is presented by way of illustration.

V.O

Card 2/2

SOV/137-57-10-1963

Translation from Referativnyy zhurnal Metallurgiya 1957, Nr 10, p 85 (USSR)

AUTHORS Kostychev, P S Salida, G. P. Shevchenko, G. I.

TITLE Experimental Determination of the Rate of Motion of Metal in the Contact Area in Strip Rolling (Eksperimental'noye opredeleniye skorosti dvizheniya metalla v ochage deformatsii pri prodol'noy prokatke)

PERIODICAL Nauchn. zap. Lvovsk. politekhn. in-t 1956, Nr 36, pp 105-111

ABSTRACT Determination of the angle of bite may be made in accordance with equations including the values of the speed (S) of the ends of the strip being rolled (on entry or exit) or in accordance with an equation for which the angle of friction has to be known. Since satisfactory methods of determining the coefficient of friction are not yet known, the former group of equations has to be recognized as the more reliable. But with this method, too, determination of the S of the strip is also inaccurate. The problem of the two concepts of the nature of the distribution of S in the contact area is examined - that which holds that S is uniform throughout the thickness and that which holds that S is nonuniform if the zone of adhesion is borne in mind. In order to study the kinematics of the rolling process the authors have developed a special instrument which permits experimental determination of the S of motion of the

Card 1/2

KOSTYCHEV, P. S. (Engineer)

"Anisotropy of External Friction." Thesis for degree of Cand. Technical Sci. Sub 12 Jun 54, Moscow Order of Labor Red Banner Sheet Inst. Gen I. V. Stalin.

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva, Jan-Dec 1950.

KOSTYCHEV, P.A.

geo (v)

Meteorological Abst.
Vol. 4 №. 2
Feb. 1953
Aqueous Vapor and
Hydrometeors

4.2.222 15 551.979.5
Kostychev, P. A. O bor'be s zasukhami v chernozemnoi oblasti posredstvom obrabotki
polei i nakopleniya na nich snega. [The struggle against droughts in the chernozem regions
by field cultivation and snow conservation.] (In: Akademii Nauk SSSR Institut Fizioligii
Rastenii im. K.A. Timiriazeva, Klassiki russkoj agronomii v bor'be s zasukhami. [Classics of
Russian agriculture in their fight against droughts.] Moscow, 1951. p. 171-236. tables.)
DLC-- The individual chapters constitute lectures delivered by the author in 1892. They are:
"Preliminary considerations on some properties of chernozem, etc. and seasonal moisture re-
gime"; "Types of soil water that are useful and useless for plants; means for accumulating snow
on fields"; "Various characteristics of chernozem during cultivation and their significance; the
characteristics of chernozem upon which the drying out of the soil depends during plant
growth, etc." Subject Headings: 1. Soil moisture 2. Drought prevention. - I.L.D.

C# KOSTYCHEV, P. A.

15

Source materials in the history of soil microbiology in
Russia. P. A. Kostychev and the beginnings of soil
microbiology. D. M. Novogrudskii (Acad. Sci., Kazakh
S.S.R., Alma Ata). *Mikrobiologiya* 19, 11-80, 1950.
22 references. Julian F. Smith

L 29128-65

ACCESSION NR: AP5005520

$$g(x, v, t) = 0 \quad (7)$$

is satisfied and an extremum is achieved by the quantity $b(T + \delta(T))$ for the given values

$$\delta(T) = a, \quad x(0) = x_0, \quad x'(0) = b \quad (8)$$

He obtains a system of equations which are similar to classical ones but for which analytic solutions are much more difficult to obtain. He succeeds in obtaining an analytic solution only for some very simple examples of an academic nature. Orig. art. has 15 formulae.

ASSOCIATION: NONE

SUBMITTED: 07 Apr 64

ENCL: 00

SUB-CODE: MA

SO REF SOV: 002

OTHER: 00X

Card 2/2

<u>29128-65</u>		<u>EIT(4)</u>	<u>R3-4</u>	<u>AFB(4)</u>	
ACCESSION NR:		AP5005528			3/0147/65/000/001/0003/0006
AUTHOR:		Kostyukov, D. I.			24
TITLE:		Systems interacting with finite signal propagation rate			3
SOURCE:		IVUZ. Aviationskaya tekhnika, no. 1, 1965, 3-6			
TOPIC TAGS:		differential equation, calculus of variations, signal propagation			
ABSTRACT:		The author investigates the problem of determining vector-functions $U(t), x(t), a(t), b(t), w(t)$ and $v(t)$ such that the system			
		$F\left(U, \frac{du}{dt}, x, v\right) = 0$			(1)
		$\frac{du(t)}{dt} - v(t) = 0$			(2)
		$b(t) = 0, t \in [t_0, T_0]$			(3)
		$a(t) - v(c, b) = 0$			(4)
		$a(t_0) = 0$			(5)
		$f(x, x, w, t) = 0$			(6)
Card 1/2					

ACCESSION NR: AP3004731

S/0147/63/000/002/0124/0133

AUTHOR: Kosty*chev, G. I.

TITLE: Necessary extremal conditions for one variational problem with a distributed parameter.

SOURCE: IVUZ. Aviats. tekhnika, no. 2, 1963, 124-133

TOPIC TAGS: variational calculus, programming, optimal programming, optimal process programming, Weyerstrass condition, Legendre condition, Jacobi condition, Jacobian condition

ABSTRACT: With reference to the author's paper in Aviatsionnaya tekhnika, no. 2, 1962, in which problems of the optimal programming of processes depending on a single scalar parameter were examined, the present theoretical paper employs generalizations of well-known theorems of classical variational calculus for the case of a functional with a distributed parameter to derive further indispensable conditions for the existence of an extremal value of a given problem. The paper establishes the theorem of the implicit functions, the indispensable conditions of extremal solutions, the necessary Weyerstrass and Legendre conditions, and the necessary Jacobian condition. The following Jacobian theorem is demonstrated:

Card 1/2

KOSTYCHEV, G.I.

Necessary extremum conditions for a variational problem with a
distributed parameter. Izv. vye. ucheb. zav., ser. tekhn. no. 23
124-133 '63. (MIRA 16:3)

(Calculus of variations)

KOSTYCHEV, G.I.

Some variational problems on approaching and interaction. Izv.-
vys.ucheb.zav.; av.tekh. 5 no.3:25-33 '62. (MIRA 15:9)
(Calculus of variations) (Mechanics, Analytic)

KOSTYCHEV, G. I.

Optimal programming in case of various conditions for the realization
of a process. Izv.vys.ucheb.zav; av.tekh. 5 no.2:23-31 '62.
(MIRA 15:7)

1. Kazanskiy aviatsionnyy institut, kafedra aerodinamiki.
(Airplanes--Handling characteristics)

On optimal programming ...

S/147/62/000/002/004/020
E031/E435

u so that one of its components takes a stationary value at $t = T$. The problem is generalized to q regimes, each described by vector functions $v[v_j(t)]$ ($j = 1, 2 \dots m$) and $u^s[u_i^s(t)]$ ($s = 1, \dots, q$) ($i = 0, 1 \dots n$), where $v(t)$ has the same value for all motions and $u^s(t)$ takes different values for each regime. A further generalization is to the case when there is a continuous spectrum of regimes depending on some parameter p ; i.e. each flight regime is characterized by vector functions $u(t, p)$ and $v(t)$. In this case the problem is to determine the optimum programme for v . This problem may be generalized to the case where there are several programmes v , each depending on a parameter p (the range for p being possibly different in each case). For each of the above problems the Euler-Lagrange variational equations are derived. The theory may be extended to problems in which the ends of the interval are not fixed or in which the boundary conditions have a different form. The functional whose extremum is sought may also be more complicated.

ASSOCIATION: Kazanskiy aviatsionnyy institut, Kafedra aerodinamiki
(Kazan' Aviation Institute, Department of Aerodynamics)

SUBMITTED: July 17, 1961
Card 2/2

39176

S/147/62/000/002/004/020
E031/E435

AUTHOR: Kostychev, G.I.

TITLE: On optimal programming when there are different
conditions for the realization of a process

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy.
Aviationskaya tekhnika, no.2, 1962, 23-31

TEXT: It may happen that the same unit can operate under different conditions but to change the programme of certain of the components which determine the flight regime is inconvenient or impossible. Moreover the operating conditions may not be known in advance and may only be given in statistical terms. In this paper the necessary and sufficient conditions are derived for an extreme value "in the mean" at the end of the interval of motion of some chosen quantity for different regimes. It is assumed that there is a vector function $u [u_i(t)]$ ($i = 0, 1, \dots, n$) whose components are functions of some argument t in the range ΩT describing the motion, which satisfies a system of ordinary first order differential equations. The problem is to determine

Card 1/2

S/147/62/000/001/002/015
E195/E435

Some variational problems ...

optimum for a motion with constant Mach numbers M_1 mean = 22.09, M_2 mean = 19.69. In this example the nose and transition to the cylindrical section are not included. The authors extend the method to the problem of vertical flight, in particular the determination of optimum body profile for given initial and final velocities, so that maximum vertical rise is achieved. They conclude by considering the case of a single missile subject to flying regimes of varying relative frequency. There are 2 figures.

ASSOCIATION: Kazanskiy aviatsionnyy institut, Kafedra aerodinamiki
(Kazan' Aviation Institute, Department of Aerodynamics)

SUBMITTED: April 11, 1961

Card 5/6

Some variational problems ...

S/147/62/000/001/002/015
E195/E435

$v = f(t) = v_0$, then

$$\sigma = \frac{\beta}{4} v_0^{-3/2} = \frac{\beta_1}{4} M_0^{-3/2}$$

With a given law of resistance, for every motion regime, same optimum body profile may be obtained by a judicious selection of "mean" velocity

$$v_{cp}^{(j)} = \frac{\int_0^T |f(t)|^j dt}{\int_0^T |f(t)|^{3/2} dt}.$$

The plot of the body profiles of solids of revolution, in accordance with laws: $M_1 = 25t + 5$ and $M_2 = (153.13t^2 + 11.18)^{2/3}$ is shown in Fig.2 (r vs θ , parabola) these profiles will be
Card 4/6